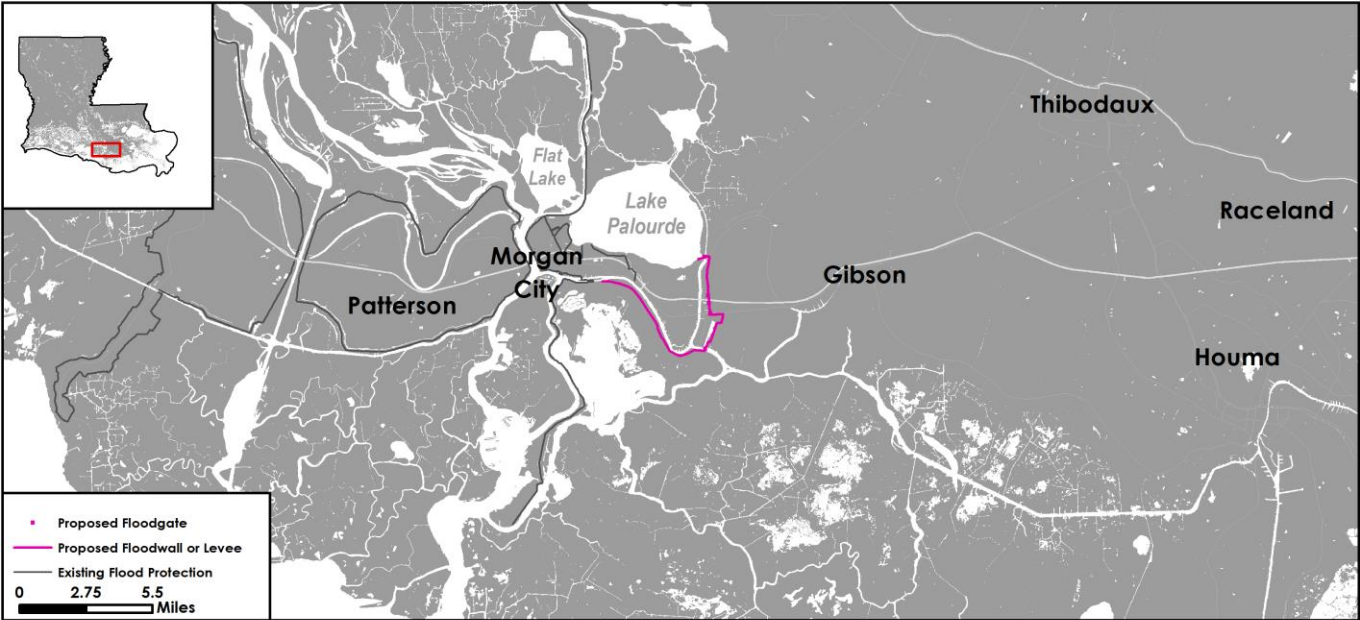


Amelia Levee Improvements

Structural Protection

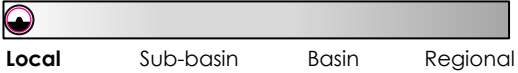
Project ID: 03b.HP.08



Description

Construction of a levee to an elevation of 18 feet NAVD88 along the GIWW between Lake Palourde and the Bayou Boeuf Lock near Amelia. Project features approximately 46,400 feet of earthen levee, approximately 13,400 feet of T-wall, (4) 40-foot roller gates, (1) 250-foot barge gate, (1) 110-foot barge gate, and a 5,000 cfs pump station.

Scale of Influence



Project Location

Assumption Parish; St. Mary Parish

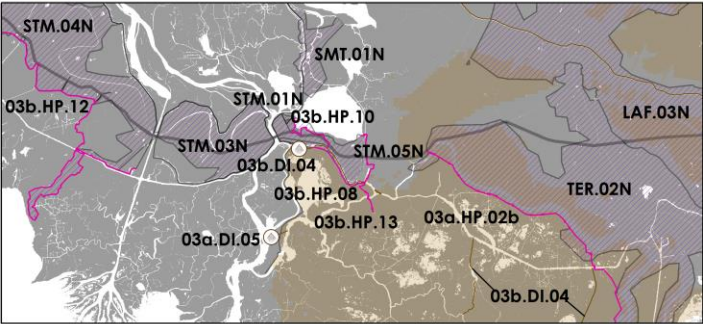
Project Duration

Planning, Engineering, and Design is estimated to take 2 years.
Construction is estimated to take 3 years.

Project Cost Estimate

	Estimated Cost
Planning/Engineering & Design	\$155,700,000
Construction	\$808,400,000
Operations & Maintenance	\$87,600,000
Total	\$1,051,700,000

Other Nearby Projects in the Master Plan



Other Project Area Statistics

Estimated Current Population <small>U.S. Census (2010), U.S. Dept. of Energy Oak Ridge National Laboratory, Land Scan (2011)</small>	25,500
Percent of Population who are Low-to-Moderate Income <small>American Community Survey (2006 - 2010)</small>	40%
Number of Severe Repetitive Loss Properties <small>Governor's Office of Homeland Security (2015)</small>	72

Amelia Levee Improvements

Structural Protection

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Economic Damage

Structural protection projects are evaluated by how they reduce Expected Annual Damage (EAD) for a particular area. EAD represents the average direct economic damage projected to result from storm surge flooding events, from Category 1 or greater storms, in any given year, taking into account both the expected damage and the overall frequency of such storms occurring. EAD is a summary measure of the potential damage averaged over the entire distribution of possible flood events. Damage is also summarized at various return periods (DRP), e.g., 100-year damage being the damage with a 1% chance of occurring or being exceeded in a given year. The following are the economic damage summaries for the Future Without Action (FWOA) and Future With Project (FWP) conditions, for the project as a whole (Table 2), and for each Risk Region (Table 3). EAD and DRP values are reported in millions of dollars.

Table 2: Expected Annual Damage

Year	FWOA	FWP	Difference
0	\$708 M	-	-
25	\$2,408 M	\$2,331 M	\$77 M
50	\$8,127 M	\$7,635 M	\$492 M

Critical Infrastructure

The data in Table 1 was provided by GOHSEP and the Homeland Security Infrastructure Program (HSIP). "Protected" assets are those that otherwise flood in FWOA conditions but are protected by the project.

Table 1: Critical Infrastructure Counts

Asset Type	Protected	Total
Airport Facility	-	-
Gas Processing	1	22
Government/Military	-	-
Electric Power Substation	-	10
Liquefied Natural Gas Terminal	-	-
Louisiana Offshore Oil Port	-	-
Manufacturing/Chemical	-	6
Electric Power Plant	1	12
Port	-	-
Petroleum Pump Station	-	4
Refinery	-	-
Water and Sewer	1	4
Strategic Petroleum Reserve	-	-
Total	3	58

Table 3: Economic Damage by Return Period at Year 50

Risk Region	50 Year		100 Year		500 Year	
	FWOA	FWP	FWOA	FWP	FWOA	FWP
Assumption	\$4,411 M	\$3,559 M	\$4,466 M	\$3,734 M	\$4,507 M	\$3,869 M
Assumption - Amelia	\$49 M	\$46 M	\$50 M	\$46 M	\$50 M	\$47 M
St. Martin	\$615 M	\$530 M	\$621 M	\$574 M	\$625 M	\$583 M
St. Mary - Lower	\$4,564 M	\$2,754 M	\$4,783 M	\$2,880 M	\$4,848 M	\$3,197 M
St. Mary - Morgan City	\$10,556 M	\$7,654 M	\$10,878 M	\$7,705 M	\$11,666 M	\$7,959 M
Terrebonne - Lower	\$1,129 M	\$1,129 M	\$1,138 M	\$1,141 M	\$1,150 M	\$1,149 M
Total	\$21,324 M	\$15,671 M	\$21,935 M	\$16,080 M	\$22,845 M	\$16,804 M